

## CHEMISTRY 209, ELEMENTARY ORGANIC CHEMISTRY

FALL 2021

## Syllabus

Textbook: Hart et al "Organic Chemistry, A Short Course"

13<sup>th</sup> Edition, Cengage

Lec	Dates <sup>1</sup>	Topic	Reading <sup>2</sup>	Problems <sup>3</sup>
0	8/23-8/31	Get Ready	Pp 1-13, xxv-xxviii	Gen Chem as needed
1	9/1	Drawing Structures (DS); Resonance(R)	Sec 1,9, 1.11-1.13, Canvas Files	DS; R on Canvas; In Chapter
2	9/8	Condensed Formulas (CF); Carbon Skeletons(CS); Orbitals (O); Classification	Sec 1.10, 1.14-1.16, Canvas Files	CF, CS, O on Canvas; In Chapter
3	9/13	Alkanes, Nomenclature	2.1-2.8	In Chapter 2.26, 27, 31, 35, 38
4	9/15	Conformations, Cycloalkanes	2.8-2.12	In Chapter 2.40, 42, 45, 46, 47, 54
5	9/20	Alkenes	3.1-3.10	In Chapter 3.33-35, 38-39
6	9/22	Quiz 1 Lec 1-4; Alkenes, Reactions	3.11-3.16	In Chapter 3.43,44, 50, 52, 53
7	9/27	Aromatic Compounds	4.1-4.7	In Chapter 4.20, 21,25,26
8	9/29	Aromatic Compounds Stereoisomerism	4.8-4.13 5.1-5.4	In Chapter 4.30a, 31,32, 44, 49
9	10/4	Stereoisomerism	5.5-5.12	In Chapter 5.27,31,33,36,39,44,54,58
10	10/6	Organic Halogen Cpd Pre-Exam Review	6.1-6.9	In Chapter 6.11, 17, 20, 26

	10/11	Exam I Lec. 1-9		
11	10/13	Alcohols, Phenols, Thiols	7.1-7.14, 7.17	In Chapter 7.26, 29, 36, 40, 42, 43, 47
12	10/18	Ethers, Epoxides	8.1-8.9	In Chapter 8.16, 19, 24, 29, 34, 37, 40
13	10/20	Aldehydes, Ketones	9.1-9.11	In Chapter 9.30-32, 41, 43, 45, 47
14	10/25	Aldehydes, Ketones	9.12-9.19	In Chapter 9.48-50, 53, 56, 57
15	10/27	Carboxylic Acids	10.1-10.7	In Chapter
16	11/1	Quiz 2 Lec 10-13 Carboxylic Acid Derivatives	10.8-10.17	In Chapter 10.37; 38; 42a,b,e; 43
17	11/3	Carboxylic Acid Derivatives	10.18-10.22	In Chapter 10. 44; 45; 49; 52; 55; 60; 61; 62
18	11/8	Amines	11.1-11.5	In Chapter 11.23-26
19	11/10	Amines	11.6-11.13	In Chapter 11. 27; 29, 33, 34, 40, 42, 43
20	11/15	Spectroscopy	12.1-12.3	In Chapter
21	11/17	Spectroscopy	12.4-12/6	In Chapter 12.19, 22, 28, 31, 34, 35, 37, 39, 48, 49
22	11/22	Heterocyclic Compounds Pre-Exam Review	13.1-13.7	In Chapter 13.11, 13-15, 17, 19, 22, 27
	11/29	Exam II Lec 10-19		
23	12/1	Carbohydrates	16.1-16.17	In Chapter 16.16, 23, 25, 30, 36, 37, 39, 42, 52

24	12/6	Proteins	17.1-17.10a, 17.13-17.15	In Chapter 17.24, 26, 28, 38, 51, 59-61.
25	12/8	Nucleic Acids	18.1-18.12	In Chapter 18.9, 11, 13-15, 19, 20, 27, 29, 32
	12/13	Review	Ch 1-13, 16-18	
	TBD	Final Exam	Noon -3 PM	

<sup>1</sup> These dates are the latest you should listen to the lecture the first time; There may be some changes in the assignments as we go along. <sup>2</sup> Pp and Sec refer to pages or sections in your textbook. Canvas refers to a folder in Files with the name of one of the topics of the lecture Read before and after listening to the lecture. <sup>3</sup> You should do all the in-text problems in the assigned reading sections and check your answers in the Solutions Manual **after** you make a serious attempt to solve the problem.

The same applies to the assigned End-of-Chapter problems. Problems from Canvas start with the initials of their file followed by numbers. There will be an assignment for every chapter we cover. Each one will have a due date about a week after the lectures on the chapter. It is very likely that some of the homework problems will appear on quizzes and exams.